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10/796,802	03/08/2004	Karl Schrodinger	075791.0238	2070
5073	7590	02/22/2008	EXAMINER	
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			ART UNIT	PAPER NUMBER
			2613	
			NOTIFICATION DATE	DELIVERY MODE
			02/22/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/796,802

Applicant(s)

SCHRODINGER ET AL.

Examiner

Hanh Phan

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 14-17, 22 and 23 is/are rejected.
- 7) ☒ Claim(s) 5-13 and 18-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 12/03/2007.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Sidman (US Patent No. 5,317,441).

Regarding claims 1, 22 and 23, referring to Figure 4, Sidman teaches a transmitting and receiving device comprising:

a transmitting device (i.e., transmitter device 63, Fig. 4) for producing a transmission signal (i.e., col. 4, lines 3-43);

a receiving device (i.e., receiver device 65, Fig. 4) for producing a received signal (i.e., col. 4, lines 3-43); and

a compensation device (i.e., delay and compensation circuit 64 and comparator circuit 66, Fig. 4) which is connected to the transmitting device (transmitter device 63) and to the receiving device (receiver device 65) and which at least reduces any crosstalk which is produced by the transmitting device in the receiving device (i.e., col. 4, lines 3-47).

Regarding claim 2, Sidman further teaches wherein the compensation device comprises a signal conditioning unit (i.e., delay and compensation circuit 64, Fig. 4) for forming a compensation signal (i.e., a compensation signal is output from the delay and compensation circuit 64, Fig. 4) which maps the crosstalk which is produced by the transmitting device in the receiving device (i.e., Fig. 4, col. 4, lines 3-47).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 4 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidman (US Patent No. 5,317,441) in view of Nomura (US Patent No. 6,731,881).

Regarding claim 3, Sidman teaches all the aspects of the claimed invention except fails to specifically teach the compensation device further comprises a subtraction device which is connected to the receiving device and to the signal conditioning unit, and which subtracts the compensation signal from the received signal produced by the receiving device, thereby forming a modified received signal with reduced crosstalk. Nomura, from the same field of endeavor teaches device for transmitting and receiving optical signals (Figure 4). Nomura further teaches the compensation device further comprises a subtraction device which is connected to the

receiving device and to the signal conditioning unit, and which subtracts the compensation signal from the received signal produced by the receiving device, thereby forming a modified received signal with reduced crosstalk (i.e., Fig. 4, col. 6, lines 60-67 and col. 7, lines 1-60). Based on this teaching, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the compensation device further comprises a subtraction device which is connected to the receiving device and to the signal conditioning unit, and which subtracts the compensation signal from the received signal produced by the receiving device, thereby forming a modified received signal with reduced crosstalk as taught by Nomura in the system of Sidman. One of ordinary skill in the would have been motivated to do this since allowing removing the noise signals and reducing the crosstalk between the signals and increasing the quality of the received signal.

Regarding claim 4, the combination of Sidman and Nomura teaches the signal conditioning unit comprises at least one control connection via which the formation of the compensation signal can be controlled (i.e., Fig. 4 of Sidman, col. 4, lines 3-47 and 56-61, and Fig. 4 of Nomura, col. 7, lines 26-60).

Regarding claim 14, Sidman further teaches wherein the transmitting device is an optical transmitting device which converts an input signal, which is applied at an electrical input, to an optical output signal, and emits this optical output signal (i.e., Fig. 4 of Sidman, col. 4, lines 3-47).

Regarding claim 15, Sidman further teaches wherein the input side of the signal conditioning unit is connected to the transmission device (see Fig. 4 of Sidman).

Regarding claim 16, the combination of Sidman and Nomura teaches wherein the signal conditioning unit is connected to the electrical input or to the optical output of the optical transmitting device (see Fig. 4 of Sidman and see Fig. 4 of Nomura).

Regarding claim 17, the combination of Sidman and Nomura teaches wherein the optical transmitting device has an optical transmitting element and a monitor diode (i.e., monitor diode 4, Fig. 4 of Nomura) which is associated with the optical transmitting element, with the signal conditioning unit being connected to a monitor connection of the monitor diode (see Fig. 4 of Nomura, col. 6, lines 60-67 and col. 7, lines 1-60).

Allowable Subject Matter

6. Claims 5-13 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 12/03/2007 have been fully considered but they are not persuasive.

The applicant's arguments to claims 1-4, 14-17, 22 and 23 are not persuasive. Regarding independent claims 1, 22 and 23, applicant argues that Applicants claim "**a connection between a compensation device and a receiving device**" in claim 1 and applicant argues that Sidman reference does not disclose such limitation. The examiner respectfully disagrees. Claim 1 recites the limitations "**a transmitting and receiving**

device comprising: a transmitting device for producing a transmission signal; a receiving device for producing a received signal; and a compensation device which is connected to the transmitting device and to the receiving device and which at least reduces any crosstalk which is produced by the transmitting device in the receiving device.” Thus, Claim 1 does not recite the limitation “a connection between a compensation device and a receiving device” in the claim.

As indicated in Figure 4, Sidman teaches a optical transceiver 61 comprises an optical transmitting device 63 and an optical receiving device 72, the optical transmitting device 63 for producing a transmission signal and the optical receiving device 65 for producing a received signal, and Sidman further teaches that the optical transceiver 61 further comprises a delay and compensation circuit 64 and a comparator circuit 66 which is connected to the optical transmitting device 63 and to the optical receiving device 65 for reducing any crosstalk which is produced by the transmitting device 63 in the receiving device 65 (see col. 4, lines 3-47). Therefore, it is believed that the limitations of claims 1-4, 14-17, 22 and 23 are still met by Sidman and the combination of Sidman and Nomura, and the rejection is still maintained.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER